

# Accessing Census Bureau Statistics: Population Estimates and Projections for the United States

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# Overview

- What are estimates and projections?
- What estimates and projections do we produce?
- Why do we produce them?
- How are they produced?
- When are they available?
- Where can you find them?

# What are estimates and projections?

- Estimates
  - For the present and the past
  - Produced using administrative records and other data
  - The official measures of population and housing units between censuses
    - Monthly and Annual (July 1) for each year after the last published census
- Projections
  - Estimates for future dates
  - Produced by making assumptions about future trends
  - Use the latest published census or estimates as a base

# What estimates data do we produce?

- Resident population

- Totals

- National, state, county, sub-county, and Puerto Rico Commonwealth and municipios

- Demographic characteristics

- National, state, and county
      - Age, sex, race, and Hispanic origin
    - Puerto Rico Commonwealth and municipios
      - Age and sex

- Other data

- Components of change

- Births, deaths, and migration

- Housing units

- Population universes

- Resident plus armed forces overseas, civilian, and civilian noninstitutionalized

# Why do we produce estimates?

## *Federal Mandate*

The Intercensal Estimates Program is required under U.S.C. Title 13, Section 181:

“During the intervals between each census of population...the Secretary, to the extent feasible, should annually produce and publish for each State, county, and local unit of general purpose government which has a population of fifty thousand or more, current data on total population and population characteristics and, to the extent feasible, shall biennially produce and publish for other local units of general purpose government current data on total population.”

# Why do we produce estimates?

## *Data Uses*

- Allocation of federal funds
- Controls for federal surveys
  - Current Population Survey (CPS)
  - American Community Survey (ACS)
  - Survey of Income and Program Participation (SIPP)
  - American Housing Survey (AHS)

# Why do we produce estimates?

## *Data Uses (cont.)*

- Denominators for statistical rates
  - Birth and death rates
    - National Center for Health Statistics
  - Per capita income
    - Bureau of Economic Analysis
- Program Planning
  - Location of public and private services

# How do we produce estimates?

## National level:

### *Cohort-component method*

$$P_2 = P_1 + B - D + NIM$$

where :  $P_1$  = Population at time 1  
 $P_2$  = Population at time 2  
 $B$  = Births  
 $D$  = Deaths  
 $NIM$  = Net international migration

## State and county level:

### *Component of change method*

$$P_2 = P_1 + B - D + NM$$

(controlled to the national estimates)

## Subcounty level:

### *Distributive housing unit method*

County population is distributed to subcounty parts based on updated estimates of housing units



# When are estimates data available?

- 2010 Census data are being released now
- Preliminary Schedule for July 2011 Estimates:

Release Date	Product
December 2011	National and state totals (including Puerto Rico)
January 2012	State age 18+
April 2012	County and Puerto Rico municipio totals
May 2012	National, state, county, and Puerto Rico demographic detail
June 2012	Subcounty totals
June 2012	State and county housing units

# Where can you find the data?

The screenshot shows the United States Census Bureau homepage. The navigation tabs at the top are **People**, **Business**, **Geography**, **Data**, and **Newsroom**. The **People** tab is circled in red, and the **Data** tab is circled in green. Below the navigation tabs, there are sections for "Census Bureau Blog", "Random Samplings", "U.S. Census Bureau Economic Indicators", "Quick Facts", "Census News", "Interactive Map", "Population Finder", and "Current Population". The "Current Population" section displays "U.S. 312,983,991" and "World 6,993,059,817". At the bottom, there is a "Measuring America—People, Places, and Our Economy" section with a grid of links.

The screenshot shows the United States Census Bureau "Data" page. The navigation tabs at the top are **People**, **Business**, **Geography**, **Data**, and **Newsroom**. The **People** tab is circled in red, and the **Data** tab is circled in green. Below the navigation tabs, there are sections for "Age and Sex", "Ancestry", "Births", "Children", "Commuting (Journey to Work)", "Computer and Internet Use", "Congressional Apportionment", "Deaths", "Disability", "Educational Attainment", "Families and Living Arrangements", "Fertility", "Foreign-Born", "Genealogy", "Geographical Mobility/Migration", "Health Insurance", "Hispanic Origin", "Housing", "Immigration", "Income", "Industry and Occupation", "International Data Base", "International Statistics", "Labor Force Statistics", "Language Use", "Marital Status and Living Arrangements", "Metropolitan and Micropolitan Statistical Areas", "Migration", "Population Estimates", "Population Projections", "Poverty", "Race", "Same Sex Couples", "School Districts", "School Enrollment", "Small Area Health Insurance Estimates", "Small Area Income and Poverty Estimates", "Veterans", "Voting and Registration", "Wealth and Asset Ownership", "Well-Being", and "Work at Home". The "Population Estimates" and "Population Projections" links are circled in red.

The screenshot shows the United States Census Bureau "Data" page. The navigation tabs at the top are **People**, **Business**, **Geography**, **Data**, and **Newsroom**. The **Data** tab is circled in green. Below the navigation tabs, there are sections for "Quick Facts", "American FactFinder", "Population Finder", "2010 Census", "Economic Census", "Interactive Maps", "Training & Workshops", "Data Tools", "Catalogs", and "Publications". The "American FactFinder" link is circled in green.

The screenshot shows the United States Census Bureau "Measuring America—People, Places, and Our Economy" page. The navigation tabs at the top are **People**, **Business**, **Geography**, **Data**, and **Newsroom**. The **People** tab is circled in red, and the **Data** tab is circled in green. Below the navigation tabs, there are sections for "ABOUT US", "FIND DATA", "BUSINESS & INDUSTRY", "PEOPLE & HOUSEHOLDS", "GEOGRAPHY", and "NEWSROOM". The "Population Estimates" link is circled in red.

# Where can you find estimates data?

Population Estimates - U.S. Census Bureau - Mozilla Firefox

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Population Estimates - U.S. Census Bureau

www.census.gov/popest/estimates.html

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## Population Estimates

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### Quick Links

- Schedule of Releases
- Terms and Definitions
- Current Estimates Data
- Historical Data
- Downloadable Datasets
- Geographic Topics
- Maps

### Upcoming Releases

County, Puerto Rico municipio, and metropolitan and micropolitan statistical area population estimates will be released in April 2012.

### Population and Housing Unit Estimates

The Census Bureau's Population Estimates Program (PEP) produces estimates of the population for the United States, its states, counties, cities, and towns, as well as for the Commonwealth of Puerto Rico and its municipios. Demographic components of population change (births, deaths, and migration) are produced at the national, state, and county levels of geography. Additionally, housing unit estimates are produced for the nation, states, and counties.

These estimates are used in federal funding allocations, as survey controls, as denominators for vital rates and per capita time series, and as indicators of recent demographic changes. With each new release of annual estimates, the entire time series of estimates is revised for all years back to the last census. All previously published estimates are superseded and archived. See the [Schedule of Releases](#) for more information.

### Latest Releases

The latest estimates of total population for the United States, States, and Puerto Rico Commonwealth - for July 1, 2011 - were released December, 2011 and January, 2012.

- [2011 National Total Population Estimates](#)
- [2011 State Total Population Estimates](#)
- [2011 Puerto Rico Commonwealth Total Population Estimates](#)
- [2011 State and Puerto Rico Voting-Age Population Estimates](#)

### Related Sites

- Federal-State Cooperative Program for Population Estimates (FSCPE)
- State Data Centers
- Population Projections
- International Programs

### Contact Us

For assistance, please contact the Census Call Center at 1-800-923-8282 (toll free) or visit [ask.census.gov](#) for further information.

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Source: U.S. Census Bureau | Population Estimates | Last Revised: January 05, 2012

# Where can you find estimates data?

American FactFinder - Mozilla Firefox

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American FactFinder

factfinder2.census.gov

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U.S. Census Bureau

AMERICAN FactFinder

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Your Selections

'Your Selections' is empty

Search using the options below:

Topics (age, income, year, dataset, ...)

Geographies (states, counties, places, ...)

Race and Ethnic Groups (race, ancestry, tribe)

Industry Codes (NAICS industry, ...)

Getting Detailed Data

The following data are available on American FactFinder:

- Decennial Census  
Taken every 10 years to collect information about the people and housing of the United States
- American Community Survey  
An ongoing survey that provides data about your community every year
- Puerto Rico Community Survey  
The equivalent of the American Community Survey for Puerto Rico
- Economic Census  
Profiles the U.S. economy every 5 years
- Population Estimates Program  
Population numbers between censuses
- Annual Economic Surveys  
Data from the Annual Survey of Manufactures, County Business Patterns, Nonemployer Statistics and more

more »

Your source for population, housing, economic, and geographic information

American FactFinder works with Mozilla Firefox 3.6 and Microsoft Internet Explorer 7. Other browsers may not perform as expected.

Quick Start

Enter search term(s) and click 'GO' ?

topic or table name for state, county or place (optional)

GO

topics race/ancestry industries

Or use the options on the left to begin your search

News and Notes GET EMAIL UPDATES

Jan 12, 2012

The Census Bureau is releasing Summary File 2 data on a state-by-state flow basis from December 2011 through April 2012. States that have been released are: NV, NM, CT, and DC. SF 2 provides detailed data on age, sex, households, families, the group quarters population, and occupied housing units for up to 331 race, Hispanic or Latino origin, and tribal population groups. Presentation of SF 2 tables for a population group is subject to a threshold of 100 or more people of a particular group in a particular geographic area. [more »](#)

Dec 15, 2011

The Census Bureau is releasing Summary File 2 data on a state-by-state flow basis from December 2011 through April 2012. States that have been released are: NV and NM. SF 2 provides detailed data on age, sex, households, families, the group quarters population, and occupied housing units for up to 331 race, Hispanic or Latino origin, and tribal population groups. Presentation of SF 2 tables for a population group is subject to a threshold of 100 or more people of a particular group in a particular geographic area. [more »](#)

Dec 08, 2011

The 2000-2010 American Community Survey 5-year estimates are now available for every state, county, city, town, place, American Indian Area, Alaska Native Area, and Hawaiian Home Land, as well as for census tracts. Block group estimates are available only in the ACS Summary File. This is the first ACS data release to include estimates for tribal census tracts and tribal block groups. [more »](#)

Nov 15, 2011

The Census Bureau has finished releasing the Summary File 1 National file. The National File includes detailed data on age, sex, households, families, the population by race and hispanic or latino origin, and the population by race and hispanic or latino origin by sex and hispanic or latino origin. [more »](#)

U.S. Population Clock

18:58 UTC (EST+5) Feb 08, 2012

312,984,694

[more population clocks »](#)

Reference Maps

Reference Maps show selected geographic boundaries for an area along with orienting features, such as roads.

United States GO

Address Search

Find Census data by entering a street address.

Load Query

Use Load Query to restore a previously saved query

LOAD QUERY

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Source: U.S. Census Bureau | American FactFinder

# What projections data do we produce?

- Resident population
  - Demographic characteristics
    - National and state
      - Age, sex, race, and Hispanic origin
- Other measures
  - Components of change
    - Births, deaths, and migration

# Why do we produce projections?

## *Data Uses*

- Used as inputs by other federal agencies
  - Health measures
    - National Institute on Aging
    - Centers for Disease Control and Prevention
    - National Cancer Institute
  - Group-specific measures
    - Bureau of Labor Statistics
- Used broadly by the public and private sectors, as well as academia, for resource planning and research

# How do we produce projections?

## National level:

### *Cohort-component method*

- Rates of components of change are projected separately for each birth cohort
  - Births, deaths, and net international migration
- Base population is advanced each year by applying the projected rates

## State level:

### *Cohort-component method*

- Current rates are calculated and projected assuming national-level change
- Controlled to the national projections

# What projections data are available?

Release Date	Product
1996	State projections
2005	Interim state projections
2008	National projections
2009	National projections (alternative migration scenarios)
2012 (anticipated)	National projections



# Where can you find projections data?

Population Projections - Main - Mozilla Firefox

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Population Projections - Main

www.census.gov/population/www/projections/index.html

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U.S. Population Projections

Search This Site

U.S. Projections Main Overview National State Methodology Reports

Overview

National

Projections of the United States resident population by age, sex, race, and Hispanic origin.

State

Projections of the resident population for each of the 50 states and the District of Columbia by age, sex, race, and Hispanic origin, consistent with the national population projections.

**Latest Projections Data**

2009 National Projections (Supplemental)

Methodology

Reports

Related Sites

Source: U.S. Census Bureau, Population Division  
Questions? / 1-866-758-1060

U.S. Projections Main Overview National State Methodology Reports

# Exercises

## Estimates

1. What is the most recent population estimate for Wyoming?
2. What is the most recent population estimate for Prince George's County, Maryland?
3. What is the most recent population estimate for Los Angeles City, California?
4. Where can you find national population estimates by race?
5. Where can you find historical state population estimates?

## Projections

1. What is the population of the nation projected to be in 2050?
2. What is the population of the nation projected to be in 2020 under the assumption of low net international migration?

# Web Address and Contact Information

## Web Address for Estimates and Projections:

<http://www.census.gov/popest/estimates.html>

<http://www.census.gov/population/www/projections/index.html>

irene.dokko@census.gov

# Thank you!